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SAVING.

A MAN is very apt to deceive himself into an idea that he *cannot* save, and that it is of no use attempting it. He convinces himself that his income is little enough for present necessities, and puts off the hope of accumulation, if he forms it at all, to that happy period when he shall be in somewhat better circumstances. His circumstances *do*, perhaps, improve; but his wants have extended as much, and still the time for saving is far ahead. Thus he goes on and on, resolving and re-resolving, until he is at last surprised by some sudden calamity which deprives him even of his ordinary earnings, or by death, which cruelly cuts him off in the very midst of the best intentions in the world.

Did any man, we would ask, ever experience a falling off in his income, even to so small an amount as a shilling in the week? Many answer they have. Did they continue to live at that reduced rate? They reply, We did so—we were compelled to do it. Very well; and pray what is the difference between being compelled to live a shilling a-week cheaper, and compelling yourself to do it? Or suppose a stationary wage, and a rising corn-market. Did you not find, that, though bread rose a penny or two per loaf, and other provisions in proportion, you still contrived to make your income procure something like the usual exhibition of victuals? You answer, Yes. And where, I would ask, is the difference between spending a small extra sum upon certain articles of food, and laying it by for accumulation, supposing it not to be so needed? It is clear, that, if you had the fortitude and strength of character to make the saving as much a matter of compulsion as the other circumstances are, you *would* save. You have, therefore, no excuse to present for your *not* saving, except that you are too weak-minded to abstain from using money which is in your power.

And yet of what infinite importance is saving, both for the community and for individuals! Without saving, which produced capital, we should yet have been all in the condition of herdsmen and hunters. Every man would have had to labour for himself. There would have been no systematic labour—no combined efforts—no public works—no men paying wages to others. All the improvements conferred on the earth by culture, by roads, by cities, by factories, by the arts of refinement, are the offspring of *SAVING*—and these would have all been wanting. Such—such is the mighty general good which has resulted from this virtue, too often stigmatised for its mean or its magnificent views, for its paltry stinginess, or its grasping ambition! Nor is it less beneficial to individuals. What, let us inquire, is the condition of a working man who never attempts to save? He of course gives up all hope of ever being better, or more his own master, than he is. But that is not all. He deliberately encounters the almost certain prospect of coming to a much less happy condition. When old age overtakes him—as it must, if he be spared by the pressure of long-continued toil—he becomes a burden either upon some public establishment or upon some individual—a condition alike odious to himself and to those whom he burdens—a condition unjust, unnatural, and destructive of all right principle and manly feeling. To live, indeed, without saving, is to live the life of a slave—with only this difference, that, by the former plan, you are not equally provided against the contingencies of sickness, and lameness, and the certain infirmities of old age.

There would be much more saving, we believe, than there is, if men would only make a beginning. Perhaps they never can by any means spare above a mere trifle at any given time, and that they think *too small*

to be worth laying by. If they were suddenly to become possessed of a larger sum, it might put them into heart, as one would say, and they would then go on very prudently, adding every week what they could avoid spending. Thus we have known a man, who had all his life only intended to save, having suddenly got five pounds as a legacy, become all at once a noted accumulator, and end by rising to a very respectable condition in life. People who have the disposition to save, ought to struggle with the weakness of supposing that any sum is too little to lay by. Little as it may be by itself, the next similar sum doubles it exactly, and when once it is a little way on, it is not only safe itself, but every subsequent spare shilling is safe too. Why, if there is no other way of getting into conceit with this excellent habit, cannot a workman leave over a small part of his wages every week with his employer, till the necessary kernel is accumulated? Only, by whatever means, make a beginning. Nothing can be done without that. And when that is done, the turn is half ended.

Working men should have it always present before their eyes, that *saving* constitutes all the difference between themselves and their employers. A human being, thrown into a civilised part of the world without any thing but his native strength, finds every thing appropriated already, and no man will give him any thing without an equivalent in labour. Labour, then, is his doom, till he can himself save or accumulate something. The more he accumulates, be it skill, or character, or money, the more independent he becomes, and the more qualified to be director of the labour of others. When he has realised some little capital, he employs it as a master, and increases it by taking advantage of the moneyless condition of those whom he himself lately resembled. This is the way of the world, and no man can attempt other expedients for advancing himself without ruin sooner or later. Let no labouring man despair of the course here pointed out. It is well known that many of the principal manufacturers in England were originally workmen, and rose to the extensive command which they now have over the labour of others, purely by that easiest of all devices—a little saving from their weekly income. In many other cases, it is found that these enviable men are the sons of manufacturers, who once were workmen; and whether capital be in the hands of its actual creator, or of one who only inherits it, still it is equally the result of *saving*. But what need is there for further argument with the man who does not save, than to show him that there are some of his own rank who do? In England, there is above thirteen millions of money in the public funds, which has been deposited there, through Savings Banks, during about twenty years; and all, or most of that sum, is the property of working men. Some individuals have so much as two hundred pounds laid aside for future use—and enviable men are they—enviable alike for their proud and self-gratulatory feelings, and for the assurance they possess that they can hardly ever cease to be independent. The general average of the deposits is only thirty-four pounds; but even that is a wonderful protection against the evils of a laborious life.* A man possessed of this sum can never be the slave of any one master, or the bondsman of any un-

prosperous locality. If a master should try to injure him, he can afford to take his chance of being a fortnight without one. He can, in fact, make his choice of masters. If any personal distress comes upon him, he is not reduced at once into the unhappy condition of a pauper; he does not re-appear among his fellows with the ignominious stigma of charity stamped on his honest face, and continue for ever after a degraded being in his own eyes. He is in reality rich—for to have more than we require to spend, is riches. It is from this prudent and right-spirited class of men that many of our future "masters"—many of our future gentry and nobles—are to arise.

There is one class of persons whom it becomes, above all others, to save—we mean the fathers of families. Many men encounter the responsibilities of this situation—which it cannot be supposed they would do, if they did not expect advantages equivalent to the responsibilities—without ever thinking, or *only* thinking, of providing for the discharge of those responsibilities in the event of their decease. They blindly and shamefully live on from day to day, under the hazard of leaving their families next hour—next moment—to the charity of a world, each individual of which reasonably declares that he has enough to do in providing for his own. If the world had a little more reflection, and saw a little more clearly the relative duties of men, it would visit conduct of this kind with a degree of the very same reprobation which it inflicts upon flagrant dishonesty, open cruelty, or actual desertion. Perhaps, if downright saving were necessary for guarding against the destitution of an orphan family, there would be a better excuse for not resorting to it. But this is not the case. There are now institutions of all kinds, which, for wonderfully small entrance-sums or annual payments, afford assurance against the current risk of death, and preclude the necessity of amassing a full provision in money. Into one or other of these institutions, every man in the enjoyment of an income has it in his power to enter. If he does not, but persists in sacrificing every penny of his earnings in the indulgences of the passing day, he deserves, even during his life, the execrations of all good men, and, after his death, a public mark of infamy.

NATURE'S MAGIC LANTERN.

BY THE ETTRICK SHEPHERD.

It is well known, that, in warm summer mornings, the valleys among our mountains are generally filled with a dense white fog, so that, when the sun rises, the upper parts of the hills are all bathed yellow sheen, looking like golden islands in a sea of silver. After one ascends through the mist to within a certain distance of the sunshine, a halo of glory is thrown round his head, something like a rainbow, but brighter and paler. It is upright or slanting, as the sun is lower or higher; but it uniformly attends one for a considerable space before he reaches the sunshine. One morning, at the time when I was about nineteen years of age, I was ascending a hill-side towards the ewe-bucks, deeply absorbed in admiration of the halo around me, when suddenly my eyes fell upon a huge dark semblance of the human figure, which stood at a very small distance from me, and at first appeared to my affrighted imagination as the enemy of mankind. Without taking a moment to consider, I rushed from the spot, and never drew breath till I had got safe amongst the ewe-milkers. All that day, I felt very ill at ease; but next morning, being obliged to go past the same spot at the same hour, I resolved to exert, if possible, a little more courage, and put the phenomenon fairly to the proof. The fog was more

* The total sum deposited in English Savings Banks amounts to £13,080,255. The depositors are in number 267,812, being an average of £34 for each. There are, however, 4537 who have above £200 each in these banks; 7627 who have more than £150; 17,214 who have above £100; and 102,621 who have above £50. The number of those who have less than £20 is 187,770. The total of Savings Banks in England is 384; besides which, there are a number of friendly and charitable societies, whose deposits are included in the above calculation. In Wales there are 23 Savings Banks, possessing in all £314,903. In Ireland, there are 73 Savings Banks, possessing £905,066. The increase of both depositors and deposits is very remarkable.

dense than on the preceding morning, and when the sun arose, his brilliancy and fervour were more bright above. The lovely halo was thrown around me, and at length I reached the haunted spot, without diverging a step from my usual little footpath; and at the very place there arose the same terrible apparition which had frightened me so much the morning before. It was a giant blackamoor, at least thirty feet high, and equally proportioned, and very near me. I was actually struck powerless with astonishment and terror. My first resolution was, if I could keep the power of my limbs, to run home and hide myself below the blankets, with the Bible beneath my head. But then again, I thought it was hard to let my master's 700 ewes go wild for fear of the de'il. In this perplexity (and I rather think I was crying) I took off my bonnet, and scratched my head bitterly with both hands; when, to my astonishment and delight, the de'il also took off his bonnet, and scratched his head with both hands—but in such a style! Oh, there's no man can describe it! His arms and his fingers were like trees and branches without the leaves. I laughed at him till I actually fell down upon the sward; the de'il also fell down, and laughed at me. I then noted for the first time that he had two colley dogs at his foot, bigger than buffaloes. I arose, and made him a most graceful bow, which he returned at the same moment—but such a bow for awkwardness I never saw! It was as if the Tron Kirk steeple had bowed to me. I turned my cheek to the sun as well as I could, that I might see the de'il's profile properly defined in the cloud. It was capital! His nose was about half a yard long, and his face at least three yards; and then he was gaping and laughing so, that one would have thought he might have swallowed the biggest man in the country.

It was quite a scene of enchantment. I could not leave it. On going five or six steps onward, it vanished; but, on returning to the same spot, there he stood, and I could make him make a fool of himself as much as I liked; but always as the sun rose higher, he grew shorter, so that, I think, could I have staid, he might have come into a respectable size of a de'il at the last.

I have seen this gigantic apparition several times since, but never half so well defined as that morning. It requires a certain kind of background which really I cannot describe; for, though I visited the place by day a hundred times, there was so little difference between the formation of that spot and the rest of the hill, that it is impossible to define it without taking a mathematical survey. The halo accompanies one always, but the gigantic apparition very seldom. I have seen it six or seven times in my life, always in a fog, and at sun-rising; but, saving these two times, never well defined, part being always light, and part dark.

One-and-twenty years subsequent to this, I was delighted to read the following note, translated, I think, from a German paper, concerning the Bogle of the Broken, an aerial figure of the very same description with mine, which is occasionally seen on one particular spot among the Hartz mountains, in Hanover. It was taken from the diary of a Mr Hawe, and I kept a copy of it for the remembrance of auld lang syne. I shall copy a sentence or two from it here; and really it is so like mine, that one would almost be tempted to think the one was copied from the other.

"Having ascended the Broken for the thirtieth time, I was at length so fortunate as to have the pleasure of seeing the phenomenon. The sun rose about four o'clock, and the atmosphere being quite serene toward the east, his rays could pass without any obstruction over the Hinrichshohe. In the south-west, however, a brisk wind carried before it thin transparent vapours. About a quarter past four, I looked round to see if the atmosphere would permit me to have a free prospect to the south-west, when I observed, at a very great distance, a human figure, of a monstrous size. A violent gust of wind having nearly carried away my hat, I clapped my hand to it, by moving my arm towards my head, and the colossal figure did the same, on which the pleasure that I felt cannot be described; for I had made already many a weary step, in the hopes of seeing this shadowy image, without being able to gratify my curiosity.

"I then called the landlord of the Broken (the neighbouring inn), and having both taken the same position which I had taken alone, we looked, but saw nothing. We had not, however, stood long, when two such colossal figures were formed over the above eminence. We retained our position, kept our eyes fixed on the same spot, and in a little time the

two figures again stood before us, and were joined by a third. Every movement that we made, these figures imitated, but with this difference, that the phenomenon was sometimes weak and faintly defined, and sometimes strong and dark."

I can easily account for the latter part of the phenomenon; for it could only be when the clouds of haze, or, as he calls them, "thin transparent vapours," were passing, that the shadows in the cloud could possibly be seen. But how there should have been three of them, and not either four, or only two, surpasses my comprehension altogether. It is quite out of nature; and I am obliged to doubt either Mr Hawe's word or the accuracy of his optics.

Among the other strange sights which I have seen among the hills, I reckon one of the most curious to have been a double shadow of myself, at a moment when only the real sun was above the horizon. One morning, in April 1783, I was walking on the Moor-Brae of Berry Knowe, gathering the ewes, when, to my utter astonishment, I perceived that I had two shadows. I immediately looked to the east, where the sun had just risen above the horizon, expecting to see two suns. But no—there was but one. There was not even one of those mock suns called by us weather-gaws. Yet there was I going to a certainty with two shadows—the one upright, and well defined, and the other tall, dim, and leaning backward, something like a very tall awkward servant waiting upon and walking behind a little spruce master. The tall one soon vanished, as I turned the hill into a glen called Carsen's Cleuch; but I never forgot the circumstance; and after I became an old man, I visited the very spot, as nearly as I could remember, again and again, thinking that the reflection of the sun from some pool or lake which I had not perceived, might have caused it; but there was no such thing. I never mentioned the circumstance to any living being before, save to Sir D. Brewster, who, of all men I ever met with, is the fondest of investigating every thing relating to natural phenomena: he pretended to account for it by some law of dioptrical refraction, which I did not understand.

But what I am now going to relate will scarcely procure credit, though, on the word of an honest man, it is literally true. I once saw about two hundred natural apparitions at one time, and altogether. One fine summer morning, as I was coming along the Hawkshaw rigg of Blackhouse, I perceived, on the other side of Douglas Burn, in a little rich glen called Brakehope, a whole drove of Highland cattle, which I thought could not be fewer than ten scores. I saw them distinctly—I never saw any beasts more distinctly in my life. I saw the black ones, and the red ones, some with white faces, and four or five spotted ones. I saw three men driving them, and turning them quietly in at corners. They were on each side of the burn of Brakehope, and quite from the drove road. I was once thinking of going to them myself, but I wanted my breakfast, was very hungry, and had no charge of that part of the farm: so I hastened home, and sent off the shepherd who had the charge of it, to drive the drove of cattle from his best land. His name was Robert Borthwick. He seized a staff in high chagrin at the drivers, and ran off; and Messrs William and George Laidlaw both accompanied him, with good cudgels in their hands. They are both alive and well to testify the truth of my report: at least, when they went to Brakehope, there were no cattle there, nor man, nor dogs, nor even sheep! There was not a living creature in the bottom of the glen where I had seen the drove, nor the mark of a cow's hoof. I was of course laughed at as a dreamer and seer of visions; for, in fact, after inquiring at our neighbours, we found that there was not a drove of Highland cattle at that time in the district. I was neither a dreamer nor a seer of visions. I was in the highest health and spirits. It was between eight and nine o'clock on a fine summer morning of mingled clouds and sunshine. I was chaunting a song to myself, or perhaps making one, when I first came in view of the drove. I was rather more than half a mile from it, but not three quarters of a mile; and as there never was a man had clearer sight than I had, I could not be mistaken in the appearance. In justification of myself, I must here copy two or three sentences from my note-book; but from whence taken, I do not know.

"On Sunday evening, the 29th ultimo, as Anthony Jackson, farmer, aged forty-five, and Matthew Turner, the son of William Turner, farmer, aged fifteen years, while engaged in inspecting their cattle grazing in Havarah Park, near Ripley, part of the estate of Sir John Ingleby, Bart., they were suddenly surprised by a most extraordinary appearance in the park. Turner, whose attention was first drawn to the spectacle, said, 'Look, Anthony, what a quantity of beasts!' 'Beasts!' cried Anthony; 'Lord bless us, they are not beasts, they are men!'

"By this time the body was in motion, and the spectators discovered that it was an army of soldiers dressed in a white military uniform, and that in the centre stood a personage of commanding aspect, clothed in scarlet. After performing a number of evolutions, the corps began to march in perfect order to the summit of a hill, passing the spectators only at the distance of about one hundred yards. No sooner had the first detachment, which seemed to consist of several hundreds, and extended four deep over an inclosure of thirty acres, attained the hill, than another

assemblage of men, far more numerous than the former, arose and marched without any apparent hostility after the military spectres. These were dressed in a dark uniform, and, at the top of the hill, both parties joined, and formed what the spectators called an L, and, passing down the opposite side of the hill, disappeared. At this time a volume of smoke, like that vomited by a park of artillery, spread over the plain, and was so impervious, as for two minutes to hide the cattle from Jackson and Turner. They were both men of character and respectability, and the impression made on their minds was never erased."

In addition to this, I may mention, that, during the last continental war, all the military and volunteers in Ireland were hurried to the north to defend the country against a spectre fleet, which had no existence in those seas. And I find, likewise, in my note-book, the following extraordinary account, which I think was copied long ago from a book called "A Guide to the Lakes of Cumberland." I was always so fond of those romantic and visionary subjects, that I have added thousands of *lees* to them, but in this I shall not deviate one word from the original writer's narrative.

"Souter Fell is nearly nine hundred yards high, barricaded on the north and west sides with precipitous rocks, but somewhat more open on the east, and easier of access. On this mountain occurred the extraordinary phenomena, that, towards the middle of the last century, excited so much consternation and alarm—I mean the visionary appearances of armed men, and other figures, the causes of which have never in the smallest degree received a satisfactory solution, though, from the circumstances hereafter mentioned, there seems reason to believe that they are not entirely inexplicable.

"On a summer's evening of 1743, as David Stricket, then servant to J. Wren of Wilton Hall, the next house to Blakehills, was sitting at the door with his master, they saw the figure of a man with a dog, pursuing some horses along the side of Souter Fell, a place so steep that no horse can travel on it. They appeared to run at an amazing pace till they got out of sight at the lower end of the Fell.

"The next morning, Stricket and his master ascended the steep side of the mountain, in full expectation that they should find the man lying dead, as they were persuaded that the swiftness with which he ran must have killed him. They expected likewise to find several dead horses, and a number of horse-shoes among the rocks, which they were sure the horses could not but throw, galloping at such a furious rate. They were, however, disappointed, for there appeared not the least vestige of either man or horse, not so much as the mark of a horse's hoof on the turf, or among the small stones on the steep. Astonishment, and a degree of fear perhaps, for some time induced them to conceal the circumstances; but they at length disclosed them, and, as well might be supposed, were only laughed at for their credulity.

"The following year, 1744, on the 23d of June, as the same David Stricket, who at the time lived with Mr William Lancaster's father, of Blakehills, was walking a little above the house, about seven in the evening, he saw a troop of horsemen riding on the side of Souter Fell, in pretty close ranks, and at a brisk pace. Mindful of the ridicule which had been excited against him the preceding year, he continued to observe them in silence for some time; but being at last convinced that the appearance was real, he went into the house, and informed Mr Lancaster that he had something curious to show him. They went out together, but before Stricket had either spoken or pointed out the place, his master's son had himself discovered the aerial troopers; and when conscious that the same appearances were visible to both, they informed the family, and the phenomena were alike seen by all.

"These visionary horsemen seemed to come from the lower part of Souter Fell, and became visible at a place called Knott. They then moved in regular troops along the side of the Fell, till they came opposite to Blakehills, when they went over the mountain. Thus they described a kind of curvilinear path, and both their first and last appearances were bounded by the top of the mountain.

"The pace at which these shadowy forms proceeded, was a regular swift walk, and the whole time of the continuance of their appearance was upwards of two hours; but farther observation was then precluded by the approach of darkness. Many troops were seen in succession; and frequently the last, or the last but one, in a troop, would quit his position, gallop to the front, and then observe the same pace with the others. The same changes were visible to all the spectators, and the view of the phenomena was not confined to Blakehills only, but was seen by every person at every cottage within the distance of a mile. The number of persons who witnessed the march of these aerial travellers was twenty-six."

It would therefore appear that my vision of a drove of Highland cattle, with their drivers, was not altogether an isolated instance of the same phenomena. It is quite evident that we must attribute these appearances to particular states of the atmosphere, and suppose them to be shadows of realities; the airy resemblance of scenes passing in distant parts of the country, and by some singular operation of natural causes thus expressively imaged on the acclivities of the mountains.

A TALE OF CLYDESDALE.

IN the Upper Ward of Clydesdale, on the very edge of a steep bank, at the foot of which runs a considerable stream, and on two sides closely embosomed in a thick wood of stately trees, stands an old dark and time-worn castle, still, however, sometimes inhabited for a short time during the shooting season, by the nobleman whose ancestors erected it. A summer tour, many years ago, led me into the vicinity of this ancient building; and as it had been a celebrated stronghold of one of the most renowned and powerful families in the kingdom, I felt an irresistible desire to visit it. It was at that time entirely deserted, except by two old domestics, a man and a woman, and exhibited all the tokens of neglect which are generally manifested in a place which has fallen under the misfortune of being forsaken for more modern and gayer dwellings. On making an application at the castle for permission to see its interior, I was much struck with the venerable countenance, the white hairs, and the grave and respectable appearance of the aged man, who, with an air of ceremonious deference, admitted me, and became my guide through its various apartments. If I at first thought him somewhat formal and taciturn, I had no occasion to complain of these freezing qualities when we entered a large apartment, and he began to recount the exploits of the ancient heroes whose dark portraits ornamented the walls, and perceived that I was nearly as well acquainted with them as himself. This historical knowledge of the family on my part seemed to establish me immediately in the good opinion of my guide, and he became animated with a sort of gratified pride as we discussed the merits of each individual named by him.

At length, after having gone over all those who had figured down to the time of Charles the First, we arrived at some which he walked quickly past, as if anxious to hurry over them with as little notice as possible. "This," said he, of one of these pictures, "was the first wife of that earl next her, and that lady on his other side was his second wife, and that gentleman on the other hand of her was a relation of the family." He then became more communicative with regard to the next picture in rotation.

Meanwhile, I had stopped to contemplate the first of the four portraits which he seemed so unwilling to notice. It was that of a very young woman of a remarkably sweet but melancholy countenance; and my curiosity being raised, I called him back, to ask if he had nothing to relate of those whose resemblance he had thus hurried past.

"Ah, there is enough to tell about them, but no good, and I never care to repeat the tale," said the old man, mysteriously shaking his head, half closing his eyes, and compressing his lips.

"There is, then, some story that belongs exclusively to these four portraits," said I.

The old man came to my side, and, pointing up with his finger to the picture of the man which hung between his two wives, he said, in a subdued tone of voice, "That is the 'Bloody Earl,' and strange and horrible things went on in this castle while he possessed it."

"I am very fond of hearing such stories," said I, taking out my purse, and presenting him with two dollars, "and I shall think myself indebted to you if you will relate to me all you have hinted at."

"Put up your purse, sir," he said, as if his pride was hurt by my offer; "I never take money from strangers; and if I felt rather unwilling to satisfy your curiosity with regard to what formerly happened here, it was because I am not in the habit of mentioning it. But as you seem to be anxious about it, and to be so well acquainted with the history of the family, I will satisfy you. But first take a look of these four pictures, for I always think I see their history in their faces."

"Well, then," I replied, "let me try if I can read any thing of their fortunes in the same way. And to begin with this young lady: she looks gentle and patient, and as if by that melancholy smile she was trying to conceal some inward sorrow."

"Right," responded the old man.

"And this 'Bloody Earl,' as you have called him, has a singular expression in those large gloomy eyes, as if of incipient madness; and that stern mouth, which looks as though it could not smile, gives, with the deep markings at its corners, and the dark sallow hue of the complexion, a look of sullen malignity to the countenance, which seems to breathe a death-chill on the beholder."

"Go on, sir," said my guide.

"But as to this lady on his left hand, I see in her only a somewhat bold-looking beautiful woman, who seems to be demanding admiration of her charms, and, perhaps, of the style with which she has been playing on the lute she holds in her hands." An affirmative nod was all the notice taken of these remarks, and I passed on to the next picture.

"And here," I continued, "I alone perceive a very handsome young fop of his time, who seems, by his long curled hair, his profusion of embroidery and lace, and the number of rings on his slender white

fingers, to have set off his person to the best advantage."

"You shall judge presently, sir," said my cicerone, as soon as I had finished my comments, "in how far these pictures speak for themselves; but, in the meantime, I will conduct you to a part of the castle you have not yet seen." The apartments to which he next carried me were those which had been formerly the finest in the castle, and were, he informed me, most inhabited by the personages of whom we had been last speaking. They were large, and had been furnished most sumptuously; but their magnificence was now tarnished and faded, and the whole appeared so gloomy, that they seemed like the very mansions of death. The old man pointed out to me, in the last room to which he led me, some dark spots on the oaken floor, which he assured me were blood-stains. There is hardly an ancient mansion to be met with free from such sanguinary marks, and I paid but small attention to them, being anxious to hurry through the rooms, that my guide might have leisure to begin the story he had promised me. This was the very chamber, however—by way, I suppose, of making it more impressive—in which he had determined to tell it; and having requested me to seat myself in a high-backed chair which stood by the side of the bed, and apologised for sitting down himself, on account of his age, he took possession of a low seat at some little distance from mine, and leaving, by his position, the blood-stains, which were by the bedside, full in my view, he began the recital of his extraordinary tale.

"You must know, sir, that I am the third generation of my family who have served this noble house, and that it was from my father, to whom my grandfather told it, that I learnt what I am about to make known to you, and which, as a faithful servant, I should not perhaps have thought myself at liberty to divulge to any one, had the title and estates continued to descend from father to son in the old line; but they have passed to another branch of the family, who heed little the mention of such old stories. My grandfather was not above five years older than the Bloody Earl, and brought up from a boy to attend upon him as his confidential servant. Thus it was that he had more to say with him than any one else, and enough to do he had to try to keep him out of mischief, for he was even in his childhood of such a singularly cruel disposition, that, not content with torturing the dumb animals, he used to delight in beating and maiming all the country boys that came in his way, which his attendant was obliged to find some way of making up for to their parents. When he grew up to man's estate, this disposition showed itself in the many duels he fought with other young men, and in his always preferring to use the sword, because it was more butcher-like. About the time, however, of his father's death, and his coming to the title, his nature seemed to be perfectly changed, for he then fell desperately in love with the Lady Mary, whose picture you passed so just a judgment on; for she liked some other person, and it was only, they said, by her father's command that she married the earl; and, indeed, it looked like it, for though she was greatly beloved for her kind heart, and her mild and sweet manners, she always seemed so broken-spirited, that it would have touched the hardest heart to look upon her. Well, the earl continued to doat upon his lady for some months after his marriage, and to seem quite a different man. Then he grew dissatisfied, because his wife did not look happy; and again all his ferocious nature returned with tenfold fury, just as you have seen some fierce wild animal that seemed to have been tamed for a little, break out again, and be more dangerous than ever; and he would kill his most favorite horses and dogs on the most frivolous pretence, or on none at all, when that fit was on him, and would threaten the lives of his domestics, so that they dared not appear in his sight; but he never offered to harm my grandfather, who was a pious man, and who could not bear to leave him, because he had been in a manner brought up with him, and, as he minded him more than any body, he always hoped, one day or other, to see him mend by his good advice; but, alas! that day never came. Well, sir, to continue, the poor young lady we were speaking of had not been married to him a twelvemonth, when she was found one morning dead in her bed, and every body thought she had died of a broken heart, for being crossed in her first love. But my grandfather would have been of a different opinion, only that there were no marks of violence about her, and that she looked so calm, just as if she were asleep, and that there was nothing discomposed about that bed, beside which you are sitting."

"What," said I, feeling much interested in what he had told me of the unfortunate young lady, "was it on this bed, then, that she drew the last breath of her ill-fated existence! But you have said there were no marks of violence: from whence, then, came the blood-stains on the floor?"

"That blood," replied the old man, "was not hers—but you shall hear. The lady was no sooner dead, than a change again came over the Bloody Earl, and he grew sullen and mooping, and would see no one but his usual attendant, and shut himself up, and would never go out but in the night, to walk among the dark cliffs and woods, and often it was thought he would take his own life. So, after he had lived in this way for two or three years, the gay young gentle-

man, who was his cousin, and whose picture is on the left of the earl's second wife, came to the castle, and he made shift to see him, in spite of his orders to the contrary, and when it was thought he would have killed him for it: in place of that, he took wonderfully to him, and turned so fond of him, that he could not bear him out of his sight; and then he began to get gradually more sociable; and when the next winter came, every one was surprised when his young relation got him persuaded to go with him to London—for the young man was an Englishman, the son of the sister of the earl's father, who married a nobleman of that country. It was in the swaggering wicked times of Charles the Second, after his restoration; and so, in his carousings at the court, the earl's young cousin introduced him to the lady whose picture you thought looked so bold. And bold and bad enough she was, for it was pretty well known that she had been one of the king's attendants. She was reckoned very beautiful, and she played upon the lute and sung to it in such a wonderful manner, that it seemed to bewitch every one who heard her. At length, she so far charmed the earl, that he married her, and brought her straightway down to this castle, and his gay young cousin came with them. And then there were such doings as these old walls had never witnessed before, and the earl seemed never to take one moment to think, for multitudes of company, and balls, and masquerades, and hunting, and gambling, and all manner of godless doings, that were enough to terrify any wise man to behold. But in some months my lady tired of this place, and would go to London again, and the earl would not consent, but swore nothing should make him leave it; and so there grew upon that, great disagreement between them; and she, being a daring woman, what did she do but set fire to the castle with her own hands, in hopes of obliging the earl to quit it! The fire was, however, discovered before it had done much damage, though some of the under apartments are still blackened by the smoke. Well, in this scheme of going to London her husband thought she was partly prompted and abetted by his cousin, and so he hated as much as he had ever loved him, and then again he began to resume his old ferocious habits, and act and speak like the 'Bloody Earl.' The room where my grandfather slept was close to the earl's, and he always burnt a lamp; and being one night waked out of his sleep by the opening of the door, he looked up, and saw the earl enter, with his dark eyes all blood-shot, and flashing with terrible and savage brightness, and his whole body trembling with the rage of his heart; and my poor grandfather grew sick with terror, not that he feared for himself, but he felt sure that his master had been about some murderous work; and the more so, that, being half undressed, the breast and sleeves of his shirt were all sprinkled with blood, as though it had spouted out upon him from wounds he had been inflicting on some one. But the earl left him little time for conjecture, as he told him directly, with diabolical satisfaction, that he had just done for his cousin. Upon that, my grandfather started out of bed, and passing the earl, flew up to this room, in the hope, that, if life was not quite extinct, something might be done for the poor young man; but it was too late; the last spark of life had flowed out at his veins, for he was stabbed in many places, and the bed and this floor were drenched in his blood. And there he that was so young, and had been so gay and so thoughtless but the night before, lay with his shirt all open and torn in the struggle, his breast covered with wounds, and his long, curled, and sweet-scented hair, that he used to be so proud of, all matted with gore."

"Now, then," said I, wound up to the last pitch of horror and disgust, "the brutal miscreant would surely meet his reward. He would be hanged at last."

"One would have thought so indeed," replied the old man; "but that was a reign when money could do any thing; and so the 'Bloody Earl' bought himself off with a great ransom from his just punishment, and got the king's pardon under pretence of derangement, and on bail for a great sum being given by his wife that she would keep him under confinement in this castle during the rest of his life: and so some rooms were fitted up for him below, and strongly secured with bolts and bars; and the iron-hearted woman, his wife, used to come here sometimes with company in the summer time, and never saw him; and then it was that his fearful punishment came, when he heard the revellings above his head in the castle, and knew she was there, and could now go and come without his control. But when she was gone again, then he used sometimes to calm down, for he was no more deranged than he had always been. And when his old attendant, for he still remained faithful to him, and still waited on him, thought he saw his opportunity, he used to try to bring him to a better mind; but when he spoke to him of repentance, of faith, and of pardon from above, he was always distressed, and disappointed in his hopes of any good change, for he got quite furious, and used to utter such dreadful words as made him shudder; and my grandfather, who could not help feeling attached to him, because he had always, even in his worst moods, shown regard for him, used to take on sadly when he considered his wretched and lost condition, and always thought, that, though his singular blood-thirsty propensity seemed in a manner natural, yet it and his other evil habits might have been corrected and got much the better of, if he had not been so foolishly indulged in his childhood and

youth by his doating parents. But I have not said you all his evil yet; for, after he was shut up, he confessed to my grandfather that he had destroyed his first sweet wife, by giving her a sleeping draught, and then running a long gold wire through her heart, because he was jealous of what he considered her continued attachment to her first love; and that he had murdered her cousin from the same motive of jealousy. Now, sir, to finish my strange and melancholy story, the earl, after he had been two years shut up, grew mad in reality, and then he wore himself out in his furious fits of impotent rage, and wasted away, and soon died; and they said his last bad lady came to great want before she left the world, by means of her gambling and other extravagances."

As I threw a backward glance, when I had left the castle, on its noble avenue of gigantic trees, where the rank and tall weeds were growing unmolested, and on the ancient pile, whose stately towers showed, by the weather stains on their grey stones, that decay had begun its work of destruction, and thought on the gay and grand carousals that had once been held there, I felt, while the story of some of its unhappy inmates was still fresh in my memory, the small necessary connection of rank and wealth with happiness and virtue, and felt grateful that I had been born in that mediocrity of station, where I was not tempted by worldly greatness to forget the paths of rectitude."

SCOTTISH STREAMS.

THE FORTH.

THE Forth is generally held the second of Scottish rivers, though the Clyde may perhaps be fully as much entitled to precedence after the Tay. The Forth is at least one of the most distinguished streams on the east side of Scotland, and, with its fifth or estuary, is frequently the object of historical notice. It has its chief sources in two upper branches, one of which rises like a rill from the north side of Benlomond, and flows through the north-western part of Stirlingshire, in an easterly direction, under the appellation of the Water of Duchray, till it joins the other branch above Aberfoil. This second arises in Loch Chon, further to the north, and, after falling over a precipice, forms first Loch Ard, and then several smaller expansions. Being joined, the united stream receives the name of the *Aeondore*, or *Black River*, which it retains for five miles, till it reaches Gartmore, when the title of the Forth is conferred on it. Besides receiving accessions from various small tributaries, it receives some large streams before reaching Stirling, as the Goodie, the Teith, and the Allan. In many places it serves as the boundary between Perthshire and Stirlingshire, but it chiefly belongs to the latter county.

As the Forth approaches Stirling, it becomes a solemn dull river, of a blackish colour, very much resembling some of the sluggish waters in England. It flows through a rich flat district of country, mostly of an alluvial soil, and winds in the most capricious manner amidst corn fields and verdant meadows. Above and below Stirling, these windings or *links* are extremely beautiful, the water describing a long series of sweeps, which are all but formed into perfect circles. In sailing along its serpentine course to or from Stirling, the stranger is puzzled and amused to the last degree by the variety of positions into which he is thrown in regard to the surrounding objects—Stirling for instance being at one moment full in his eye, and the next at his back—while all observation of the cardinal points is fairly out of the question. At Stirling the Forth is crossed by a stone bridge, celebrated as a very important pass. Small vessels ascend this length, and steam-boats ply at the height of the tides. The river continues in this condition for about twenty miles, or six by a direct course, to Alloa, which is the head of the regular navigation. It then expands into a bay twenty miles in length, and from two to eight in breadth. At the bottom of the bay the land projects on each side, and forms the strait called the Queensferry. This gut in the waters of the Forth measures about two miles in breadth, but is rendered much less in appearance by an island called Inch Garvie, lying nearly in the middle, between the two shores. This strait forms the great thoroughfare betwixt the south and north of Scotland, in which capacity it has been used from the most remote period. It derives its name from Margaret, Queen of Malcolm Canmore—a princess celebrated for her charitable and beneficent virtues, who frequented the passage of the Forth here on her numerous excursions to and from Edinburgh and Dunfermline.

The Forth continues contracted to about three or four miles in breadth, for a distance of four miles, when it gradually again expands into an arm of the sea or *Firth*. It is now entitled the Firth of Forth;

and, as it approaches Leith and Edinburgh on the south shore, and Kirkcaldy on the north, swells out to from six to nine miles in breadth. From this point it continues to expand for many miles to the eastward, and is finally lost in the German Ocean at Dunbar on the south coast, and Crail on the north, draining, as it has been calculated, a superficies of 574 miles. From Alloa to its junction with the ocean, the distance may be about fifty miles. The Firth of Forth is of great importance to the country as regards navigation and commerce. In ancient times it was considered dangerous for sailing vessels, but such is no longer the case. It has shoals at different places; however, they are all correctly laid down in charts, and for this and other reasons a wreck here is nearly unknown. The only seaport of any consequence on its shores is Leith, the port of Edinburgh, half-way up on its south side. On the opposite coast of Fife, the harbours are all better than on the Edinburgh side, but they are less frequented.

The trade carried on by means of the Firth of Forth has been considerably augmented of late years by the institution of the Forth and Clyde Canal, which opens into it at Grangemouth, and gives a passage to and from Leith by water with the west of Scotland. Within the last twenty years it has been made very useful in steam navigation. At all times of the day, it presents to the eye different steam-vessels engaged in ferrying across, or in carrying passengers up and down the channel. In the mouth of the Firth lies the flat Isle of May, and between Leith and Kirkcaldy lies Inchkeith, an island of several miles in circumference. Both have lighthouses. Farther up there are a few islets in different places. The whole have a bare, and generally a rocky appearance. In some, there are the remains of religious edifices. At different places on either side are fishing villages, from whence boats are sent out to sea to catch white fish, for the daily markets at Edinburgh and elsewhere. In certain seasons vast quantities of herrings are caught, most of which are sold in a fresh state. A considerable quantity of oysters are also taken in the Firth, but as regards quality and size they are generally inferior to those in many places in the United Kingdom. The Firth of Forth comes repeatedly under notice in the history of Scotland, as having been the sea which bore to the metropolis navies engaged in warring against the kingdom, or in bringing royal personages to the country.

THE KNOT-RECORDS OF PERU.

It is generally known that the inhabitants of Peru were found, on the discovery of America, to possess a degree of intelligence and a range of social institutions, which plainly pointed out that the nation must have previously had a communication of some kind with Europe. Among the other circumstances distinguishing them from savages, was their system of recording events and conveying ideas by means of knotted cords, called *Quipos*. From the accounts left by the Spaniards who discovered the country, it appears that these *quipos* were, in general, formed of the intestines of animals, like our catgut, on which were knots and loops, the varieties of which represented letters; and there was a class of men like our notaries and clerks of council, whose business it was to compose these volumes; the name given to these officers *Quipo-camayos*. The knots are diversified by colours, for minute distinction. There is extant, in a Spanish work published in 1608, a minute account of all that took place at a meeting between Garcilasso de la Vega, an officer of the king of Spain, and the inca of Peru; being a transcription of the report or record taken of the proceedings by two *Quipo-camayos*, who sat all the time in the hall of audience, engaged upon their task. In the year 1827, there appeared in London a small quarto volume, giving an account of a bunch of these knot-records, which had fallen into the hands of one Alexander Strong, a ship-carpenter, and been brought by him to this country. The story given as to their transmission from an ancient inca of Peru, through many different hands, until they came into those of Mr Strong, need not be repeated here; but we shall give a description, so far as we are able, of the object itself.

The *quipos* recovered by Strong were contained in a box of wood which had been cut out of a solid block, and measured eighteen inches in length by eight in breadth and depth. On the outside were painted many apparently unmeaning figures, including one, however, of a man on horseback, which is said to be alluded to in the *quipos* within, as representing a dream, in which one of the Peruvian incas foresaw the arrival of the equestrian people by whom they were to be overcome.

The *quipos* consist of seven bunches, each of which is formed upon a ring of animal sinew, bedaubed with different paints, and measuring from three to six inches in diameter. The whole form one narrative, which begins with the smallest ring, and goes on to the largest. From the circumference of each ring, proceed from thirty to a hundred cords, exactly resembling the smallest strings of a violin; each string

being from twelve to fifteen inches long, and united at both ends to the ring, so as to form what in a ribbon would be called a bow. On each string are from ten to thirty knots of different degrees of complexity, from a simple through-put, to a complication of loops and twists of three quarters of an inch in diameter. The knots and intervening portions of the string are covered with a substance which gives them the appearance of having been dipped in sealing wax: the colour being for the most part green, but in some of the knots yellow, and in others red.

Alexander Strong, who purchased them for ten pounds, from a person who had bought them at Buenos Ayres, with the hope of selling them to advantage in Britain, also received with them a key, consisting of five small slips of leather, scrawled over with something like writing; and it ought to rank high among anecdotes of perseverance, that this humble and unlettered man actually taught himself Latin, in order that he might acquaint himself with the key, which, strange to say, is in that language, and then submitted to the inconceivable drudgery of untying the whole successive parts of this worse than Gordian knot. Having first arrived at English for the various Latin words, he proceeded to apply them to the various knots which they referred to, and finally, by wonderful skill and industry, made out a rude narrative of the whole, which remains as a monument of his extraordinary task.

It appears that, in the *quipos* belonging to Mr Strong, proper names are given in red knots, numerals in yellow, while other parts of speech are in green. On examining the numerals in the *quipos*, it is found that, instead of advancing as we do by tens, the Peruvians advanced by threes; which is perhaps the reason that certain American nations have been represented as unable to count farther than three. One is represented by the commonest knot, such as sempstresses generally make on a thread previously to taking the first stitch. Two is represented by a knot, in which the end is put through once more before drawing tight, as a sempstress does when it is desired to increase the magnitude of the knot. And three is expressed by performing the same operation an additional time. But four assumes a new conformation, for it is expressed by a loop of the simplest kind, such as is made, in nautical language, by taking a bend on the bight of the rope; and five is expressed by the same kind of loop, with an additional twist in the *clinch* or part where the whole is drawn tight; and six has another twist still. Seven is another kind of loop, which is manifestly different from four, though it would probably puzzle a forecane-man to define the difference in words. Eight is the same with the addition of another twist in the *clinch*, and nine with another. Ten is no loop at all, but a portentous kind of a knot, such as might be made in a cat-o'-nine-tails where the object was to kill. Eleven is the same with an additional twist in the *clinch*; and twelve with another. Thirteen is the same kind of knot as ten, only with a loop sprouting out on one side; and fourteen and fifteen distinguish themselves by their twists as before. In this manner the system goes on to a hundred—for so far the unknown apocalyptic has chosen to carry his operations;—exhibiting a new knot at every third numeral, and expressing the two next by additions at the *clinch*. The knots, as may readily be imagined, in time grow exceedingly complicated and artificial; but they invariably adhere to the ternary system described.

The number of knots in the skin of proper names is 192, and in the three collections of green knots, 231; so that, with the addition of the hundred numerals, the whole number of knots or ideographic symbols is 433. The positive contents, as presented by the key, are in the main very analogous to the account of Peruvian traditions given by Humboldt and Bonpland, as follows:—"The cosmogony of the Mexicans—their traditions on the subject of the mother of mankind falling from her first estate of happiness and innocence—the notion of a great inundation, in which a solitary family escaped upon a raft—the account of a building like a pyramid, raised by the pride of mankind and destroyed by the anger of the gods—the ceremonies of ablution practised at the birth of children—their idols made of maize flour kneaded into paste, and distributed in portions to the people collected in the inclosure of the temples—their confessions of sin made by penitents—their religious associations like our convents of men and of women—the belief universally extended, that white men with long beards, and of great sanctity of manners, had changed the religious and political system of their countrymen—all these circumstances together had led the ecclesiastics who accompanied the army of the Spaniards at the time of the conquest, to believe that at some very remote period Christianity had been preached in the newly-found continent. Some learned Mexicans thought they discovered the apostle St Thomas, in the mysterious personage, high-priest of Tula, whom the Chululans knew under the name of Quetzalcóatl. There is no doubt that the doctrines of the Nestorians, mixed with the opinions of the Buddhists and the Chamans, found their way through Manchou Tartary into the north-east of Asia. It is possible, therefore, to suppose with some appearance of reason, that ideas connected with Christianity may have been communicated by the same road to the Mexican races, and particularly to the inhabitants of that northern region from which the Tolteques migrated."

SINGULAR STORY OF EDWARD GUNN.

SOME time about the middle of last century, there flourished in Edinburgh a respectable tailor, whose name for the present shall be Gunn. This individual, at his decease, left a family, of which the most remarkable member was a son named Edward, who at an early age showed an uncommon taste for drawing and painting, and who was accordingly educated with a view to his following out that art as a profession.

In the year 1788, there occurred one of those midnight brawls so common at the time, which, however, was attended with very unpleasant consequences. unnecessary to be here particularised. The affair had assumed so serious an aspect, that several young men of respectable connections found it necessary to go into retirement for a season. Mr Edward Gunn was then a wild, roving blade; but whether he had any share in the riotous proceedings alluded to, was not exactly ascertained. Be this, however, as it may, the fact is certain, that he shortly afterwards took his departure for London, accompanied by a twin-sister, to whom he bore a striking resemblance. Here he remained in obscurity for several years, at the end of which period it was given out that he was dead, and that his sister was about to return to her native city. Accordingly, the supposed young lady (who was no other than Mr Edward himself in disguise) made her appearance; and, what may appear hardly credible, notwithstanding the disadvantages of a very masculine voice, and a beard which was by no means equivocal, he succeeded not only in imposing upon the public in general, but even upon his guardian, who never knew of the deception up to the day of his death. By this gentleman's influence, the soi-disant Miss Gunn succeeded in establishing a most respectable drawing and painting academy for young ladies. Such were the talents and assiduity of the teacher, that her school soon rose into celebrity, and continued for at least twenty years the most prosperous establishment of the kind in Edinburgh; in addition to which, she attended all the principal female boarding-schools, to give instructions in that branch of education.

As the analogy which subsists between poets and painters is sufficiently known, it will not appear surprising that Miss Gunn should have essayed her talents in rhyme; and, accordingly, at the period of the threatened French invasion, she published a poem, entitled, "Compliments to Painters," in which she indulged in some pretty free remarks upon her brethren of the brush, and against whose anticipated malice she invoked the protection of the Edinburgh volunteers, who were then in great vogue, in lines commencing thus:—

"Guard and protect me, all ye volunteers,
Brave Scotia's champions, matchless cavaliers!"

The success which attended her drawing establishment might have enabled her to realise a very competent fortune, had it not been that latterly she fell into very dissipated habits, which soon occasioned a gradual falling off in her school, and ultimately reduced her to extreme poverty. After undergoing all the vicissitudes of hardship and privation, she was at length necessitated to take refuge in the charity workhouse; where she had remained only a short time, when the notable discovery was made, that the supposed female belonged to the opposite sex. This circumstance having been reported to the managers, and it being proved, besides, that she was an incorrigible drunkard, she was forthwith expelled from that establishment. Thus was she again thrown upon her own resources; and having resumed the male attire, which she had laid aside for full thirty years, she (or rather we must now say *he*) had recourse to his old profession, and contrived for a time to pick up a precarious livelihood. What was his ultimate fate, the writer of this is unable to state; but during a temporary gleam of prosperity, Mr Gunn married a young woman, about twelve years ago, by whom he had several children—upon one occasion twins. The person who communicates this narrative, about twenty years ago received lessons in drawing from him when in the female disguise, and has frequently seen him latterly in male attire. As to whether the male or female habit became him most, the opinion of the landlady with whom he resided some time previous to his marriage may be taken:—"Weel-wat," she used to

say, "he was an unco thief-like limmer of a woman; but troth, he's a weel-faured wiselike chield, now that he's a man."

BIOGRAPHIC SKETCHES.

HUMBOLDT, concluded.

IN January 1803, our travellers took their departure for Guayaquil, in the vicinity of which they found a magnificent forest of palms, and other trees, which here vegetate in indescribable luxuriance. From this place they proceeded by sea to Acapulco, in New Spain. It was Humboldt's intention only to make a few months' stay in Mexico, and return with all possible speed to Europe. But, amongst other circumstances, the attractions of so beautiful and diversified a country determined him to remain until the middle of winter. After making various philosophical observations and experiments, our travellers set out in the direction of Mexico. They passed through the burning vallies of Mescala and Papagayo, where the thermometer stood in the shade at 104° of Fahrenheit, traversed the elevated plains of Chilpanzugo, Theulotepec, and Tasco, where oaks, cypresses, fir-trees, and European grain, flourished in a mild climate. After visiting the silver mines of Tasco, the oldest, and formerly the richest, in Mexico, they reached the capital, which is very pleasantly situated, and is distinguished from all the cities of the New World by its scientific institutions. After a residence of some months, during which Humboldt corrected the longitude of Mexico, our travellers visited the celebrated mines of Moran and Real del Monte, and examined the obsidian Oyamel, which lie embedded in the layers of pearl-stone and porphyry, and served the former inhabitants for knives. The basaltic columns are as remarkable for their regularity as those of Staffa: some are horizontal, and others have various degrees of inclination, but they are for the most part perpendicular. After visiting other parts of the kingdom, they set out for Guanajuato, a large city, placed in a narrow defile, and celebrated for its mines. They were here occupied for two months with measurements and geological investigations, examined the baths of Comagillo, whose temperature is about 25° of Fahrenheit higher than that of those in the Philippine Islands, and then traversed the valley of St Jago to Valladolid, the capital of the former kingdom of Meacoacan. Notwithstanding the continuance of the heavy autumnal rains, they descended by Patzquaro, which is situated on the edge of an extensive lake towards the shores of the Pacific Ocean, to the plains of Jorullo. Here they entered the great crater, making their way over crevices exhaling ignited sulphuretted hydrogen, and experiencing much danger from the brittleness of the lava. The formation of this volcano is one of the most extraordinary phenomena which have been observed in nature. The plain of Malpais, covered with small cones from six to ten feet high, is part of an elevated table-land, bounded by hills of volcanic and other rocks. From the time of Columbus's discovery till 1750, the surface of the country had experienced no remarkable vicissitude. In June of the above year, however, hollow sounds were heard to issue from the earth, and these were followed by a series of earthquakes which continued for two months. From the beginning of September, every thing seemed to announce the re-establishment of tranquillity; but on the night of the 28th, the subterranean thunder again began to peal in the ears of the affrighted inhabitants, who fled for refuge to the neighbouring mountains. A tract not less than from three to four square miles rose up in the shape of a dome; and flames were also said to issue from a space of above six square miles, while fragments of red-hot rocks were hurled to an immense height, and the earth, convulsed far and wide, reeled like a sinking ship. Thousands of the small cones noticed above suddenly appeared; and in the midst of them six great masses, called hornitos or ovens, sprung up from a gulf. The most elevated of these, which is about 1640 feet above the original level of the plain, is the great volcano of Jorullo, which burns continually. At the time when Humboldt visited this place, he was informed by the natives that the heat of these ovens had formerly been much greater. The thermometer rose to 203° when placed in the fissures exhaling aqueous vapour. All the cones emitted a dense smoke, and from some of them subterranean sounds were heard to issue. The Indians of this province are represented as being the most industrious of New Spain. They have considerable talent for cutting out images in wood, and dressing them in clothes made of the pith of an aquatic plant, which, being very porous, imbibes the most vivid colours. At Toluca, our travellers visited the wonderful hand-tree, the *cheiran-thostemon* of Cervantes, of which at one time there was supposed to exist but a single specimen. After their arrival at Mexico, they spent some time in arranging their botanical and geological collections, and in making philosophical observations. In January 1804, they quitted Mexico, with the intention of examining the eastern declivity of the Cordillera of New Spain. They also measured the great pyramid of Cholula, an extraor-

dinary monument of the Tolteck race. It is composed of bricks, apparently sun-dried, alternating with layers of clay. Our travellers now descended to the port of Vera Cruz, where they embarked for Havannah, from whence they went to Philadelphia, spending here and at Washington two months, and then set sail for Europe.

The results of this expedition, conducted with so much talent and zeal, have been of the very highest importance. Previous to Humboldt's visit to New Spain, our information regarding that interesting and extensive territory was meagre and inaccurate. From various causes, none of the least of which was the narrow policy of the government there established, it lay for centuries in dim obscurity of "darkness visible," which the eye of research was unable to penetrate. The maps were very inaccurate, and even the latitude and longitude of the capital remained unfixed. This gave rise to a curious circumstance: A total eclipse of the sun took place on the 21st of February 1803, and threw the inhabitants into a state of great consternation; for the almanacks, calculating from a false indication of the meridian, had, in predicting the event, announced that it would be scarcely visible. To Humboldt belongs the honour of having dispelled in some measure the darkness in which we remained regarding that country. It would be impossible almost to give an idea of the vast mass of intelligence contained in his great work upon the subject. Never traveller returned to his native land so richly fraught with all that could interest and instruct. With respect to natural history, the information already laid before the public eye, obtained from the observation of six years, exceeds anything that had been presented by the most successful cultivators of the same field during a whole lifetime. The rich collections which the travellers brought with them are unique in their kinds, and of inestimable value. They contain, amongst other things, 6300 kinds of plants. The account of their travels was published by Humboldt in the splendid work which appeared at Paris, Hamburg, and London, in 1810 and following years. The whole series, which consists of twelve volumes quarto, and three volumes folio, with two collections of maps and one of picturesque engravings, has been justly called, by a competent judge, "a work of gigantic extent and richness, to which the modern literature of Europe can hardly offer a parallel." The first division is devoted to general physics, and to an account of their journey. The first part of this account is contained in the numbers already published, under the separate title of "Vues des Cordillères et Monumens des Peuples de l'Amerique," and is adorned with about sixty engravings: the second division relates to zoology and comparative anatomy: the third contains a political essay on New Spain: the fourth is devoted to astronomy: the fifth to mineralogy and magnetism: and the sixth to botany.

The labour required for reducing the observations of our travellers to a state fit for the public eye, must have been very great. The mind of Humboldt, however, is as much characterised by its activity as by the vastness of its acquisitions. He engaged himself besides in various investigations, part of which were published in the foreign journals. In concert with M. Gay Lussac, with whom he lived in the most intimate friendship, he has made numerous magnetic experiments, and verified Biot's theory respecting the position of the magnetic equator. They have found that the great mountain chains, and even the active volcanos, have no appreciable influence on magnetic power, and have established the fact that it gradually diminishes as we recede from the equator. On the return of the philosophers from America, Bonpland was appointed by Bonaparte to the office of superintending the gardens at Malmaison, where the Empress Josephine had formed a splendid collection of exotics. In 1818, he went to Buenos Ayres, as professor of natural history. In 1820, he made an excursion into the interior of Paraguay; but when he arrived at St Anne, on the eastern bank of the Parana, where he had established a colony of Indians, he was unexpectedly surrounded by a large body of soldiers, who destroyed the plantation, and carried him off a prisoner. He was confined chiefly in Santa Martha, but was allowed to practise as a physician. Humboldt applied in vain for the liberty of his friend, for whom he cherished a sincere affection. According to a late report, he has obtained his liberty. In October 1818, Humboldt visited London, where it is said the allied powers requested him to sketch a plan of the political situation of the South American people. For the execution of his plan to undertake a scientific journey to the East Indies and Thibet, the king of Prussia, at Aix-la-Chapelle, in November 1818, granted him a yearly pension of 12,000 dollars, and the use of the necessary instruments. But this journey was abandoned. Humboldt lived many years in Paris, devoted to the sciences, till, in the winter of 1822, he was called to accompany the king of Prussia on his journey through Italy. His residence at Naples was the cause of his inquiries into the formation of volcanos, the result of which he gave to the public in a small essay. In the latter part of 1826, he returned from Paris to Berlin. In 1827, he made a journey to Northern Asia, as far as the confines of China, in which he was much assisted by the Russian government, which wished to obtain, through him, more correct information respecting the character and contents of the Ural Mountains.

No regular narrative of this journey has yet been published, but the following outline of it we have obtained from an able work by Mr Macgillivray, entitled, "Travels and Researches of Baron Humboldt," which is an abstract of a French work entitled "Fragments of Asiatic Geology and Climatology, par A. de Humboldt."

Our traveller, accompanied by MM. Ehrenberg and Gustavus Rose, embarked at Niguel-Novgorod, on the Volga, and descended to Kasan and the Tartar ruins of Bolgari; from thence he went by Perm to Jekatherinenburg, on the Asiatic side of the Uralian Mountains—a vast chain, comprising several ranges which run nearly parallel to each other. The highest summits scarcely attain an elevation of 4000 or 5000 feet, but, like the Andes, they follow the direction of a meridian from the neighbourhood of Lake Aral to the vicinity of the Frozen Sea. A month was spent in investigating the central and northern parts of these mountains, malachite mines of Goumescherskoi, the great magnetic ridge of Blagodat, and the celebrated deposits of Mourzinsk, in which topaz and beryl are found. Near Niguel-Tagilsk (a country which has been compared to Choco in South America, in respect of its character and productions), a mass of platina (the heaviest, most durable, and in many respects the most valuable of the metals, not excepting gold), weighing about 2½ lbs. troy, has been found. From Jekatherinenburg the travellers went by Tioumen to Tobolsk on the Jotich, and from thence by Tara (a desert of Baraba, which is dreaded on account of the torments caused by the multitudes of insects) to Barnaul on the banks of the Ob, the picturesque lake of Kolyvan, and the rich silver mines of Schlagenberg, Riddersk, and Zyrianovski, situated on the south-western declivity of the Altaic range. They proceeded southward from Riddersk to Oust-Kamenogorsk, and passed through Boukhtarminsk to the frontier of Chinese Zungaria. They even obtained permission to cross the frontier, in order to visit the Mongol post of Bates, or Khonimailakhon, northward of the lake Dzaisang, and returned to Oust-Kamenogorsk. From this place they went along the steppe of the Middle Horde of the Kirghiz, by Semipolatsinsk and Ouish, and the lines of the Ichim Cossacks and Tobol, to reach the southern part of the Ural, where, in the vicinity of Miask, in a deposit of very small extent, and at a few inches depth, were found three masses of native gold, one of which weighed about 16, and the other above 28 lbs. troy. They next proceeded along the Southern Ural, to the fine quarries of green jasper at Orsk, where the river Jaik crosses the chain from east to west. From thence they passed by Souberlink to Orenburg, which is below the level of the sea, and then visited the famous salt-mine of Hetzki, situated in the steppe of the Little Kirghiz Horde. They afterwards inspected the principal place of Ouralisk Cossacks; the German colonies of the Saralov government, on the left bank of the Volga; the great salt-lake of Eldom, in the steppe of the Kalmucks; and a fine colony of Moravians at Sarepta; and, finally, arrived at Astracan. The principal objects of this excursion to the Caspian Sea were the chemical analysis of its waters, which Mr Rose intended to make; the observations of the barometrical heights; and the collection of fishes, for the great work of Baron Cuvier and M. Valenciennes. From Astracan the travellers returned to Moscow by the isthmus which separates the Don and the Volga, near Tichanskaya and the country of the Don Cossacks. In the course of seven weeks, Humboldt had passed over the frontiers of Chinese Zungaria, between the forts of Oust-Kamenogorsk and Boukhtarminsk, and Khonimailakhon (a Chinese post to the north of the lake Dzaisang), the Cossack line of the Kirghiz steppe, and the shores of the Caspian Sea. In the important commercial towns of Semipolatsinsk, Petropaulska, Troitzkaia, Orenburg, and Astracan, he obtained from the Tartars, Bucharians, and Tachkendia, information respecting the Asiatic regions in the vicinity of their native country. At Orenburg, where caravans of several thousand camels annually arrive, an enlightened individual, M. de Gens, has collected a mass of materials of the highest importance for the geography of Central Asia. It is understood that this illustrious traveller is now engaged in the preparation of these his journeyings into the Asiatic Continent.

A TURKISH SKETCH.

THE Mahomedans generally, and the Turks in particular, are a people who place a great deal of blind dependence on Fate, or Providence. Instead of using the means to effect a special purpose, they will sit down in apathy, and believe that God will do all that is required for them. This species of folly is well illustrated in the story of "Anastasius," a work which will hardly have been perused by many of our readers. The incident is thus related:—

"I possessed not that even temperature of mind which steers clear of extremes: I could never do any thing in moderation. My soul fired at the recent instances I had witnessed in *Macgillivray* and others, of immense fortunes made in trade; and, already in love with wealth on its own account, I doubly revered it in view of the power obtainable through its influence; for ambition would never leave me entirely quiet, but, when it was turned out of doors, stole in at the window, and added its persuasions to the other motives which had determined me before to become a

first-rate merchant. So fast galloped my imagination, that already I saw myself standing with one leg in Cashmere, and with the other in St Domingo; with the right hand loading hemp at St Petersburg, and with the left gold and negroes on the Guinea coast; and covering with my vessels at once the Atlantic and the Mediterranean, the Euxine and the South Sea. I had genius; I could, if I chose, force perseverance; and the only trifles wanted were capital, credit, and correspondents.

Providence had just kept in store for me the only person ready to hold all these desiderata at my disposal on the shortest notice. I found every thing needful in an old Moslem, grown enormously rich through nothing but his undeviating perseverance to do all that, by common calculation, ought to have reduced him to beggary. In the true spirit of predestination, Welid maintained that no mode of conduct begot ill-luck so infallibly as caution. 'It manifested mistrust,' he said, 'in the ways of Providence; and one single pious ejaculation at the outset of an enterprise was worth all the calculations of worldly wisdom.' Indeed, Welid might quote his whole life in proof of this doctrine.

But, to go no farther back in the recapitulation than the instances of the last twelve months:—The Porte had sent away for riotous behaviour the Slavonians who do the garden work about Constantinople, just at that period of the spring when the setting fruits require constant irrigation. All Welid's neighbours strained every nerve to supply the deficiency, while Welid alone saw the pining of his oranges, his citrons, and his pumpkins, with perfect apathy, and only exclaimed, 'God is great!' What was the consequence?—The sky, usually of brass in that season, all at once opened its sluices, and made Welid's garden, on the very brink of annihilation, yield a double crop.

Again: the unusual rains, in the hottest month of the year, had produced a dreadful plague. Most of Welid's friends took some precautions against the infection, while Welid alone seemed by preference to go where the malady was rife, and only repeated, 'God is great!' What ensued?—Not a finger of Welid's ached all the time; but he became heir to every one of his relations who had evinced more prudence.

And again: the dampness of the summer was followed by an autumn so dry, that every night saw Constantinople disturbed by some dreadful conflagration. Several of Welid's acquaintance therefore watched their premises, while Welid heard the cry of fire in his very yard, without saying any thing but 'God is great!' How did the business end?—Welid's house indeed was burnt to the ground: but the falling walls discovered a deposit of gold and jewels sufficient to build a score of palaces.

What, therefore, could be more natural than for Welid to infer, that the more imprudences he committed, the less he could fail to prosper? Nor did he lack examples of the mischiefs arising from a more wary conduct; for—not to mention his own brother, who, with a sincere and heartfelt wish for wealth, had, from the mere apprehension of making a bad hit, never made a good one; nor his nephew, who, grudging a servant's wages, had, in his loneliness, been murdered by a band of robbers; nor his cousin, who, to save his old vessel a scouring, had sold his gold for brass—what but Emin's resorting to medicine in a malady from which he might have recovered, had made him take a deadly poison? What but Talib's fear of a pursuing foe had caused him to fall into a torrent, and be drowned? And what but Nasser's inventing a most ingenious trap for thieves, had kept him confined by the leg in his own fetters, until he died of hunger amidst all his dearly purchased treasure?

The vast fortune which Welid had by his imprudence acquired, I advised him to employ in some grand speculation, and to make me his partner in the concern. Others might not have thought me the fittest person for a commercial associate, but I repeated 'God is great!' until Welid committed all his affairs to my management. We went, he, his son, and myself, to Smyrna; there freighted a vessel with cotton, and resolved to carry our merchandise to Marseilles, where we could not fail to find a good market. As I contributed but little toward the purchase, my portion was to be but small in the profits: this, however, remained a tacit clause between us, too well understood to be expressed. No regular account, no legal vouchers, no written memorandum whatever, was drawn up of our respective shares. Welid was not a man to trouble himself about such formalities. 'Each knew his own,' he said, 'and that was enough.'

In one respect, however, he showed an invincible obstinacy. He had taken it into his head that it would be manifesting his trust in Providence to hire the first vessel he should meet with. This happened to be precisely the oldest and craziest concern in the harbour—a thing on the eve of being broken up as unfit for service. The circumstance, however, so far from deterring, only confirmed Welid in his purpose. He thought it a most fortunate opportunity of signalling his reliance on heaven, and no entreaty or remonstrance could make him desist from freighting this miserable wreck. In preference to a dozen stout vessels disengaged. He would not even insure. It was flying in the face of Providence, and almost as bad as atheism or blasphemy; so that, unable to persuade my partner, I had insurance made in my own name on the whole cargo.

We now set sail. Hardly had we got into the latitude of Chio, when Welid's son—as hale a boy to all appearance as ever was seen—suddenly fell ill, and died. Our crew, chiefly Provençals, doubted not his being a victim to the plague, which had begun to spread in Smyrna, and became almost petrified with terror. Welid himself, though he had appeared fond of his child while alive, shed not a tear on his death, bore his loss with his inherent apathy, and only as usual exclaimed 'God is great!' I felt so angry with him for his insensibility, that I almost longed to see him go to the shades after his boy.

The sailors only wondered that so infirm an old man as Welid—after having sat open-mouthed, as it were, to inhale the contagion which had felled a robust youth—should still continue to breathe, but did nothing to get rid of him, and suffered him to live on unmolested. It is true that scarcely had his son breathed his last, than there arose a storm, of which the very first blast shivered our bark to splinters. It sent twelve fine young sailors and their captain to the bottom, but kindly spared Welid and me; and as the cargo was now lost at all events, I determined to atone for whatever evil thoughts might, without my leave, have risen in my breast, by doing my utmost to save my partner. I lugged him after me on a floating henceoop; and, as it had not required an out of the way rough sea to make an end of our crazy skiff, this vehicle supported its load, until the wind and current carried us ashore on the neighbouring coast of Samos.

Welid, who had only suffered himself to be saved, like one of his bales of cotton or bags of corn, without making a positive resistance, experienced on this rather trying occasion so little extraordinary wear and tear of body or mind, that, weak and old as he was, he still brought ashore strength enough to cry out with great satisfaction on the loss of his cargo, as he had done on that of his child, 'God is great!'—while I, on whom had fallen all the weight of exertion, could scarce articulate from exhaustion.

Our shipwreck close to the land in broad daylight had collected round us a number of fishermen, all impressed with becoming gratitude towards Providence, not so much for having spared our lives, as for having destroyed our vessel on their shore. Too late, however, to push our persons back into the waves from which we had just emerged, they exerted themselves the other way, and helped us on, lest we should witness their proceedings in regard to the wreck. The little money we had in our pockets was employed in getting ourselves conveyed, as soon as the storm subsided, to Kooshadasi on the mainland of Anadoli; but this short voyage completely exhausted our finances, and on our arrival we had not a para left.

Nor were we, for the present, in want of a para. The Turk, where bigotry interferes not with his better feelings, is as charitable as he is confiding. He neither attributes good fortune entirely to man's own sagacity, nor ill-luck solely to his imprudence, and neither is apt to listen with suspicion to the tale of the indigent, nor to cast blame on the conduct of the unfortunate. Looking upon adversity as proceeding from the same high source from whence flows prosperity—feeling as little degraded by the pressure of God's hand upon him, as elated by its support—he confers charity without pride, as he asks it without meanness. We, therefore, who came as supplicants, in need of every thing, found every thing we needed. Every inhabitant vied with the rest in supplying our necessities, and providing for our comforts. Hence Welid, who wanted repose, resolved to avail himself for a few days of the hospitality so handsomely tendered; while I only requested a horse and a guide, to take me on to Smyrna. The two animals soon were found, and I set off.

My first care, on arriving at this place, was to recover the insurance on the shipwrecked cargo. After some delay, occasioned by legal inquiries, affidavits, &c., I got indemnified for every bale of cotton put on board. Welid, who in the meantime had also reappeared, declined to share in the recovery, as he had refused to join in the insurance. It was only by stratagem I could make him accept a small part of the produce. No way cured, however, by his loss, of his blind confidence in his destiny, he continued to commit fresh imprudences, until, from the condition of a wealthy merchant, he became reduced to that of a poor basket-maker; but whenever we met, he still would lay aside his osier twigs to point to heaven, and to cry out, 'God is great!'

A CHAPTER FOR THE WORKING CLASSES.

THERE is hardly any thing more odious in our great manufacturing and trading system, than combinations, whether of masters or workmen. Combinations are neither more nor less than conspiracies to secure private and unnatural advantages at the expense of the public, and in their character are essentially opposed to those generous and really profitable principles of free trade which all sound-thinking men are now ready to advocate, and which at least the working classes have been long strenuous in insisting upon as necessary for their welfare. We hold it as an imperishable maxim in our general economy, that every thing vicious will sooner or later find its level. Truth

and justice will survive, though all mankind were to combine to extirpate them. It is one of the in-prescriptive just rights of man, that he is entitled to make the most of his labour. He ought to be at liberty to roam over the whole earth to seek out employment suited to his abilities or his taste; in the same degree so should the master be entitled to get his work done where and how he chooses. Both have equal rights and privileges to be respected. And it will be found in the long-run that this species of liberty is the most profitable, as well as the most comfortable for all parties. Combinations to restrict such a freedom, as being adverse to the great principles which secure the rights of individuals, may appear to be advantageous for a while, but they cannot exist beyond a brief period of time. They are founded on a fallacy. The present generation may encourage them; but the next, if more intelligent, which it is likely to be, will look upon them as simply resulting from that species of ignorance which in the dark ages of our history invested bodies of men with the injurious privileges of trading incorporations, and conspired against the welfare of the community.

Mr Babbage, in his admirable work on Machinery and Manufactures, thus illustrates the subject of combinations:—"The effects arising from combinations amongst the workmen, are almost always injurious to the parties themselves. There are numerous instances in which the public suffer by increased price at the moment, but are ultimately gainers from the permanent reduction which results; whilst, on the other hand, the improvements which are often made in machinery in consequence of 'a strike' amongst the workmen, most frequently do an injury, of greater or less duration, to that particular class which gave rise to them. As the injury to the men and to their families is almost always greater than that which affects their employers, it is of the utmost importance to the comfort and happiness of the former class, that sound views should be entertained by them upon this question. For this purpose a few illustrations of the principle which is here maintained, will probably have greater weight than any reasoning of a more general nature, though drawn from admitted principles of political economy. Such instances will, moreover, present the additional advantage of appealing to facts known to many individuals of those classes for whose benefit these reflections are intended.

There is a process in the manufacture of gun-barrels for making what, in the language of the trade, are called *skelps*. The *skelp* is a piece or bar of iron, about three feet long, and four inches wide, but thicker and broader at one end than at the other: and the barrel of a musket is formed by forging out such pieces to the proper dimensions, and then folding or bending them round into a cylindrical form, until the edges overlap, so that they can be welded together.

About twenty years ago, the workmen employed at a very extensive factory in forging these *skelps* out of bar-iron, 'struck' for an advance of wages, and as their demands were very exorbitant, they were not immediately complied with. In the meantime, the superintendent of the establishment directed his attention to the subject; and it occurred to him, that, if the circumference of the rollers, between which the bar-iron was rolled, were to be made equal to the length of a *skelp*, or of a musket-barrel, and if also the grooves in which the iron was compressed, instead of being equally deep and wide, were cut gradually deeper and wider from a point in the rollers, until it returned to the same point, then the bar-iron passing between such rollers, instead of being uniform in width and thickness, would have the form of a *skelp*. On making the trial, it was found to succeed perfectly, a great reduction of human labour was effected by the process, and the workmen, who had acquired peculiar skill in performing it, ceased to derive any advantage from their dexterity.

It is somewhat singular that another and a still more remarkable instance of the effect of combination amongst workmen should have occurred but a few years since in the very same trade. The process of welding the 'skelps,' so as to convert them into gun-barrels, required much skill, and after the termination of the war, the demand for muskets having greatly diminished, the number of persons employed in that line was very much reduced. This circumstance rendered combination more easy; and upon one occasion, when a contract had been entered into for a considerable supply to be delivered on a fixed day, the men all struck for such an advance of wages as would have caused the completion of the contract to be attended with a very heavy loss. In this difficulty, the contractors resorted to a mode of welding the gun-barrel, according to a plan for which a patent had been taken out by them some years before this event. It had not then succeeded so well as to come into general use. In consequence of the cheapness of the usual mode of welding by hand-labour, combined with some other difficulties with which the patentee had had to contend. But the stimulus produced by the combination of the workmen for this advance of wages, induced him to make new trials, and he was enabled to introduce such a facility in welding gun-barrels by rollers, and such perfection in the work itself, that, in all

probability, very few will in future be welded by hand-labour.

The process consisted in turning a bar of iron, about a foot long, into the form of a cylinder, with the edges a little overlapping. It was then placed in a furnace, raised to a welding heat, and taken out, when a triblet, or cylinder of iron, being placed in it, it was passed quickly through a pair of rollers. The effect of this was, that the welding was performed at a single heating, and the remainder of the elongation necessary for bringing it to the length of the musket-barrel, was performed in a similar manner, but at a lower temperature. The workmen who had combined were of course no longer wanted, and instead of benefiting themselves by their combination, they were reduced permanently, by this improvement in the art, to a considerably lower rate of wages: for as the process to which they had been habituated required peculiar skill and considerable experience, they had hitherto been in the habit of earning much higher wages than other workmen of their class. On the other hand, the new method of welding was far less injurious to the texture of the iron, which was now exposed only once, instead of three or four times, to the welding heat, so that the public derived advantage from the superiority, as well as from the economy of the process. Another advantage has also arisen from its introduction; for the new process is now applied to the manufacture of iron tubes, which can thus be made at a price which renders their employment very general. They are now to be found in the shops of all our larger ironmongers, in various lengths, and of different diameters, with screws cut at each end, and are in constant use for the conveyance of gas for lighting, or of water for warming our houses.

Similar examples must have presented themselves to those who are familiar with the details of our manufactures, but these are sufficient to illustrate one of the results of combinations."

BRISSON'S CAPTIVITY IN AFRICA.

SHIPWRECK on the coast of Africa, particularly on the western coast, has been always attended with peculiar circumstances of horror and distress. The unhappy sufferers, on escaping from the raging billows of the ocean, find themselves exposed to unmitigated misery, on a barren and inhospitable coast, abounding not only with wild beasts and noxious reptiles, but also inhabited by men of a most barbarous disposition, exceeding in ferocity even the savage animals of the desert themselves. The country of Morocco, which extends about 600 miles along the shores of the north-western part of Africa, is possessed by a race of men who are characterised as being jealous, deceitful, superstitious, and cruel to a most excessive degree; so that any mariners who have had the misfortune to be wrecked on these coasts, have almost invariably met with immediate death from their hands, or have been condemned to suffer the miseries of a most wretched and hopeless captivity amongst them. There are two sorts of inhabitants in Morocco—the Arabs, who dwell in moveable villages, composed generally of about 100 tents each; and the Berbers, Barbarians, or aborigines, who live in towns and villages. There are also a great number of Christian slaves, and some merchants on the coast, besides a multitude of Jews, who carry on almost all the trade, especially by land, with the negroes, to whom they send large caravans, which travel over vast deserts almost destitute of water. The inhabitants of these western parts of Africa have, therefore, been long a various and mingled race, and, along with the other nations on the African coast as far as the borders of Egypt, are known to Europeans by the general denomination of *Moors*.

On the open plains of Morocco the climate is torrid, yet genial. Its grand chain of mountains, denominated *ATLAS*, from whence the neighbouring ocean has received the name of the *Atlantic*, has its summits often covered with snows; and between these and its bases, there is presented almost every diversity of climate and temperature. Excessive rains sometimes deluge the level districts, to the destruction both of vegetables and animals; there is sometimes a drought, which continues till vegetation is almost wholly withered; and armies of locusts occasionally devour the produce of the most fruitful seasons, before it can be converted to the use of man. Sheep and oxen are the most plentiful among the domesticated animals in these countries; the camel is the common beast of burden; the horse and the mule are employed for riding; fowls, pigeons, and partridges, hares, and, in the northern parts, rabbits, are in sufficient abundance. The wild animals of the forests and mountains, are, deer of different sorts, antelopes, foxes, bears, lions, and tigers.

Monsieur Brisson's account of his shipwreck on these barbarous coasts, attended with all its usual

horrors, and of a most distressful captivity in consequence of it, among the savage inhabitants, is possessed of great interest and importance. The interest is almost equal to that which is excited in reading Byron's *Narrative*; and a great similarity exists between his sufferings and those of Monsieur Brisson, from whose narrative we shall now select a few of the most interesting particulars.

His voyages to Africa, the author says, had already been productive of many hardships and much loss to him, when he received an order from the French government, in the month of June 1785, to embark for the island of St Louis, at Senegal. When he arrived at the Canaries, the vessel on which he was aboard passed between these isles and that of Palma; but the captain, having refused to follow M. Brisson's advice, the ship was soon after driven upon the coast, and cast away. In many particulars, it will be observed that this catastrophe is remarkably similar to that of the *Medusa* in later times. Immediately after this fatal occurrence, he asked the captain at what distance they might be from Senegal; but the answer he received not proving satisfactory, he informed his companions in misfortune, that he could not flatter them with the hope of being able to conduct them to any village of the tribe of Tragea, where he might perhaps have been known to some Arab, who had relations at the island of St Louis, in which case their captivity would have been shorter and less rigorous. "I am afraid," added he, "of meeting with some hordes of the tribe of Ouadelims and the Labdesseba, a ferocious people, who live like real savages, who always wander through the deserts, and who feed on the milk of their camels."

According to M. Brisson's conjecture, they fell immediately into the hands of the Labdesseba, and these barbarians, after plundering the ship, stripped him and his companions, and then crowded them into a small hut, covered with moss, which was above a league distant from the sea. As M. Brisson's master happened to be a *talbe*—for so these savages name their priests—he thought he should procure some alleviation of his misfortunes, by bestowing upon him the few jewels he had in his possession; namely, two watches with their chains, a ring set with diamonds, and two hundred livres in specie. The *talbe* hereupon made him great promises, but he soon proved to be as deceitful as he was barbarous. To avoid another tribe still more savage, the Arabs made their prisoners proceed, by forced marches, to the interior parts of the country, during which they were so oppressed with thirst, that they could scarcely move their tongues. In this situation they obliged them to climb mountains of a prodigious height, and covered with sharp flints, by which their feet were dreadfully cut and mangled. Their masters made a kind of paste of barley meal, which they mixed with water in the hollow of their hands, and swallowed without chewing it.

"As for us slaves," says M. Brisson, "we had nothing to eat but the same kind of paste. The Arabs threw it to us upon a kind of carpet, which our patron generally spread below his feet when he repeated his prayers, and which he used as a mattress during the night; after having kneaded this leaven a long time, he gave it to me, that I might divide it among my companions. One can hardly conceive how disagreeable this leaven was to the taste. The water with which it was mixed had been procured upon the seashore, and had been preserved afterwards in the skin of a goat newly killed. To prevent it from corrupting, they had mixed a kind of pitch with it, which rendered the smell of it doubly noxious. The same kind of water was given us to drink, and, bad as it was, our allowance of it was extremely small."

Next morning, after a most laborious march over a plain, upon which the rays of the sun fell almost perpendicularly, the prisoners were employed in unloading the camels, and in pulling up roots; a labour which was exceedingly painful, as in that country the root and herbs are mixed with briars and thorns. When the sand was well heated by the fire, the Arabs covered a goat with it, until it was completely baked; and immediately, without giving themselves time to free it from the sand which adhered to it, they devoured it with incredible voracity. After having thoroughly gnawed the bones, they made use of their nails to scrape off the remaining flesh; after which, they threw them to their miserable slaves, bidding them eat quickly, and make haste to reload the camels, that their journey might not be retarded. At length, after a march of sixteen days, during which they were exposed to the greatest hardships and fatigue, they arrived in a most deplorable and emaciated condition, at the habitation of their masters. The reception which they met with from the women was mortifying in the utmost degree. When they had satisfied the first emotions of their curiosity by looking at them for some time, they bestowed the most abusive language upon them, spit in their faces, and even pelted them with stones. The children, copying their example, amused themselves by pinching them, pulling their hair, and scratching them with their nails. The heat was so excessive, that the flocks, half-starved, could find no pasture, and the sheep and goats returned with their dugs almost empty; and yet it was their milk, and that of the camels, which was to supply food for a numerous family. "One may judge after this," says M. Brisson, "how much our portion was diminished; as we were Christians,

the dogs even fared better, and it was in basins destined for their use that we received our allowance!"

Their situation became every day more wretched. The end of October was approaching, and a single drop of rain had not fallen for three years. The plains and valleys were entirely burnt up, and nothing remained for the nourishment of the cattle. The desolation was universal, when an Arab from a distant part of the country came to inform them that refreshing showers had covered those parts where he resided with abundance of vegetation. Joy then succeeded to fear and distress. Every one struck his tent, and all set out together. This was the thirtieth time they had changed their habitation, and that their fatigues had been renewed, for these hordes never remain above twelve or fifteen days in the same encampment. At length they arrived at the wished-for spot, where the sand was so impregnated with moisture, that the least pressure of the body made the water spout up in great abundance. Here the prisoners would have thought themselves very happy, could they have procured a hurdle made of osier twigs to repose upon, and a coarse-napped carpet of wool to cover them; but amongst the Arabs none but those who are rich use such pieces of furniture. To add to their misfortunes, their portion of food was increased, but only with water, so that in a little time they had nothing to eat but water whitened with meal, which weakened them to such a degree as can hardly be conceived. Wild plants and raw snails were then almost the whole of their aliment.

M. Brisson's master had promised to send him to Mogador, and to furnish him with the means of procuring his liberty; but he soon put an end to his delusion, and this unfortunate man lost every hope. He no longer met in the fields his miserable companions, and he regretted above all the loss of the captain. One evening he found him stretched out on the sand, and in such a condition that he scarcely knew him but by the colour of his body. In his mouth he held one of his hands, which only his extreme weakness prevented him from devouring. Hunger had so much changed his figure, that his appearance was horrid and disgusting. A few days after, the second captain, exhausted by want, fell down under a tree, where he remained exposed to the attacks of a monstrous serpent. Some hungry crows frightened the venomous reptile by their cries, and, perching upon the dying man, began to tear him to pieces; while four savage monsters, still more cruel than the furious snake, beheld this scene, and suffered the unhappy wretch to make vain efforts without deigning to lend him the least assistance. M. Brisson endeavoured to save him if possible, but he was prevented by the Arabs, who ill used and insulted him. Not knowing which way to bend his steps, he hastened away from this scene of horror.

Almost all the prisoners sunk under their misfortunes in succession, and no one was left to comfort Brisson under his sufferings; he became frantic through excess of thirst, and even the Arabs themselves died from the same cause. They preserved with the greatest care the water which they found in the stomachs of their camels, and boiled their flesh in it. At length his master's brother-in-law purchased him five camels; and this man having occasion to go to the court of the emperor of Morocco upon business, he carried M. Brisson along with him. The French consul at that time was luckily in great favour with the emperor, on account of some presents which he had made him; for this reason the emperor set all the prisoners at liberty, and amongst the rest M. Brisson, who then found his way, once more, home to his native country.

ANECDOTES OF ANIMALS.

[From Jesse's Gleanings in Natural History.]

A SENTIMENTAL PIGEON.

A man, set to watch a field of peas which had been much preyed upon by pigeons, shot an old cock pigeon who had long been an inhabitant of the farm. His mate, around whom he had for many a year cooed, and nourished from his own crop, and assisted in rearing numerous young ones, immediately settled on the ground by his side, and showed her grief in the most expressive manner. The labourer took up the dead bird, and tied it to a short stake, thinking that it would frighten away the other depredators. In this situation, however, his partner did not forsake him, but continued, day after day, walking slowly round the stick. The kind-hearted wife of the bailiff of the farm at last heard of the circumstance, and immediately went to afford what relief she could to the poor bird. She told me that, on arriving at the spot, she found the hen bird much exhausted, and that she had made a circular beaten track round the dead pigeon, making now and then a little spring towards him. On the removal of the dead bird, the hen returned to the dove-cot.

INGENUITY OF BEES.

A large brown slug made its way into a glass hive, where the operations of the bees could be distinctly seen. Having killed the slug, and finding that they were unable to get it out of the hive, they covered it over with the thick resinous substance called propolis, and thus prevented its becoming a nuisance to the colony. Into the same hive, one of the common brown-shelled snails also gained admittance. Instead of sub-

bedding it in propolis, the bees contented themselves with fixing it to the bottom of the hive, by plastering the edge with that substance. I have now in my possession a regular fortification made of propolis, which one of my stocks of bees placed at the entrance of their hive, to enable them the better to protect themselves from the attacks of wasps. By means of this fortification, a few bees could effectually guard the entrance, by lessening the space of admission, which I had neglected to do for them.

INSTANCE OF SAGACITY IN A DOG.

He informed me that a friend of his, an officer in the forty-fourth regiment, who had occasion, when in Paris, to pass one of the bridges across the Seine, had his boots, which had been previously well polished, dirtied by a poodle-dog rubbing against them. He in consequence went to a man who was stationed on the bridge, and had them cleaned. The same circumstance having occurred more than once, his curiosity was excited, and he watched the dog. He saw him roll himself in the mud of the river, and then watch for a person with well-polished boots, against which he contrived to rub himself. Finding that the shoe-black was the owner of the dog, he taxed him with the artifice; and after a little hesitation he confessed that he had taught the dog the trick, in order to procure customers for himself. The officer being much struck with the dog's sagacity, purchased him at a high price, and brought him to England. He kept him tied up in London some time, and then released him. The dog remained with him a day or two, and then made his escape. A fortnight afterwards he was found with his former master, pursuing his old trade of dirtying gentlemen's boots on the bridge.

A POODLE DOG.

A friend of mine had a poodle dog possessed of more than ordinary sagacity, but he was, however, under little command. In order to keep him in better order, my friend purchased a small whip, with which he corrected the dog once or twice during a walk. On his return, the whip was put on a table in the hall, and the next morning it was missing. It was soon afterwards found concealed in an outbuilding, and again made use of in correcting the dog. It was, however, again lost, but found hidden in another place. On watching the dog, who was suspected of being the culprit, he was seen to take the whip from the hall-table, and run away with it, in order again to hide it. The late James Cumming, Esq., was the owner of the dog, and related this anecdote to me.

PROPER PRIDE IN A DOG.

A gentleman, a good shot, lent a favourite old pointer to a friend, who had not much to accuse himself of in the slaughter of partridges, however much he might have frightened them. After ineffectually firing at some birds which the old pointer had found for him, the dog turned away in apparent disgust, went home, and never could be persuaded to accompany the same person afterwards.

THE ANTIPATHY OF THE HEN TO WATER.

It is well known, yet the following is a curious instance of habit overcoming nature:—A hen, who had reared three broods of ducks in three successive years, became habituated to their taking to the water, and would fly to a large stone in the middle of the pond, and patiently and quietly watch her brood as they swam about it. The fourth year she hatched her own eggs; and finding that her chickens did not take to the water as the ducklings had done, she flew to the stone in the pond, and called them to her with the utmost eagerness. This recollection of the habits of her former charge, though it had taken place a year before, is not a little curious.

THE TREASURES OF THE DEEP.

What hid'st thou in thy treasure-caves and cells,
Thou hollow-sounding and mysterious main?—
Pale glistening pearls, and rainbow-colour'd shells,
Bright things which gleam unreck'd of, and in vain.
Keep, keep thy riches, melancholy Sea,
We ask not such from thee!

Yet more—the depths have more. What wealth untold
Far down, and shining through their stillness, lies!
Thou hast the starry gems, the burning gold,
Won from ten thousand royal argosies.
Sweep o'er thy spoils, thou wild and wrathful Main,
Earth claims not these again!

Yet more—the depths have more. Thy waves have roll'd
Above the cities of a world gone by.
Sands hath fill'd up the palaces of old—
Seaweed o'ergrown the halls of revelry.
Dash o'er them, Ocean, in thy scornful play,
Man yields them to decay!

Yet more—the billows and the depths have more.
High hearts and brave are gather'd to thy breast—
They hear not now the booming waters roar—
The battle-thunders will not break their rest.
Keep thy red gold and gems, thou stormy grave—
Give back the true and brave!

Give back the lost and lovely—those for whom
The place was kept at board and hearth so long—
The prayer went up through midnight's breathless gloom,
And the vain yearning woke 'midst festal song.
Hold fast thy buried sales, thy towers o'erthrown—
But all I seek thou own!

To thee the love of woman hath gone down—
Dark flow thy tides o'er manhood's noble brow—
O'er youth's bright locks and beauty's flowery crown;
Yet must thou hear a voice—Restore the dead.
Earth shall reclaim her precious things from thee—
Restore the dead, thou Sea!

—New Monthly Magazine.

ENGLISH JOCKEYS.

THE present Samuel Chifney presents the beau ideal of a jockey; elegance of seat, perfection of hand, judgment of pace, all united, and power in his saddle beyond any man of his weight that ever yet sat on one. It is scarcely necessary to add, that he is son of the late celebrated jockey of his name, by the daughter of a training groom, consequently well bred for his profession, to which he is a first rate ornament. Such a rider as James Robinson may slip him, but no man can struggle with him at the end, and his efforts in his saddle, during the last few strides of his horse, are quite without example. There are, however, peculiarities in his riding. Excellent judge as he is of what his own horse and others are doing in a race, and in a crowded one too, he is averse to making running, sometimes even to a fault. Let whatever number of horses start, Chifney is almost certain to be amongst the last until towards the end of the race, when he creeps up to his brother jockeys in a manner peculiarly his own. But it is in the rush he makes at the finish that he is so pre-eminent, exhibiting, as we said before, powers unexampled by any one. His riding his own horse, Zingane, for the Claret stakes (Craven meeting, 1829), was a fine specimen of his style, when contending against Buckle and James Robinson, and winning, to the astonishment of the field. In height, he is about five feet seven inches, rather tall for a jockey, and not a good waster. In fact, he is subject to much punishment to get to the Derby weight. Samuel does not ride often, but whenever he does, his horse rises in the market, as was the case with his father before him at one period of his life.

Some anecdotes are related of Chifney, confirming his great coolness in a race, and, among others, the following:—Observing a young jockey (a son of the celebrated Clift) making very much too free with his horse, he addressed him thus—"Where are you going, boy; stay with me, and you'll be second." The boy drew back his horse, and a fine race ensued; but when it came to a struggle, we need not say who won it. Chifney's method of finishing his race is the general theme of admiration on the turf. "Suppose," says he, "a man had been carrying a stone, too heavy to be pleasant, in one hand, would he not find much ease by shifting it into the other? Thus, after a jockey has been riding over his horse's fore-legs for a couple of miles, must it not be a great relief to him when he sits back in his saddle, and, as it were, divides the weight more equally? But caution is required," he adds, "to preserve a due equilibrium, so as not to disturb the action of a tired horse." Without doubt, this celebrated performer imbibed many excellent lessons from his father, but he is considered to be the most powerful jockey of the two.

James Robinson, also the son of a training groom, is a jockey of the highest celebrity, and, as far as the art of horsemanship extends, considered the safest rider of a race of the present day. He may owe much of this celebrity to his having, when a boy, had the advantage of being in the stables of Mr Robinson, the chief of the Newmarket trainers, and riding many of the trials of his extensive and prosperous studs. When we state that such a rider as Robinson is considered equal to the allowance of three pounds weight to his horse, we can account for his having been employed by the first sportsmen of the day. It is supposed that he has ridden the winners of more great races than any jockey of his time. In 1823, he won the Derby and the St Leger, receiving one thousand pounds from a Scotch gentleman (a great winner) as a reward for the latter; and in the following year he went a step beyond this. He won the Derby, Oaks, and was married, all in the same week; fulfilling, as some asserted, a prediction—according to other authorities, a bet. We may also notice his kindness towards his family, which we have reason to believe is most creditable to him. As a jockey, he is perfect.

William Clift is next entitled to notice, as one of the oldest, the steadiest, and best of the Newmarket jockeys, and famed for riding trials, but he has taken leave of the saddle. William Arnall, who has ridden for most of the great sportsmen of the day, has long been in esteem at Newmarket, and considered particularly to excel in matches. He has been much afflicted with gout, but when well, is a fine rider, and steady and honest, as his father was before him. Being occasionally called upon to waste, he feels the inconvenience of his disorder, and the following anecdote is related of him:—Meeting an itinerant piper towards the end of a long and painful walk, "Well, old boy," said he, "I have heard that music cheers the weary soldier; why should it not enliven the wasting jockey? Come, play a tune, and walk before me to Newmarket." Perhaps he had been reading the Mourning Bride.—Quarterly Review.

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